



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/862,412

05/21/2001

Seth M. Demsey

MS160304.1/40062.100US01

8482

7590

10/31/2006

Homer L. Knearl

Merchant & Gould P.C.

P.O. Box 2903

Minneapolis, MN 55402-0903

EXAMINER

BULLOCK JR, LEWIS ALEXANDER

ART UNIT

PAPER NUMBER

2195

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,412

Applicant(s)

DEMSEY ET AL.

Examiner

Lewis A. Bullock, Jr.

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-22,24,26,27,29-33,50 and 51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-20,22,24,26,27,29-33,50 and 51 is/are rejected.
- 7) ☒ Claim(s) 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/6/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 6-13, 24, 26, 27, 30, 32, 33, 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over STAELIN (U.S. Patent 5,835,777) in view of MADANY (U.S. Patent 6,493,870).

As to claims 1 and 2, STAELIN teaches a computer program product stored on at least one tangible media encoding a computer program for executing on a computer system (target system) a computer process for generating, before execution of an application (via porting the application to the client and debugged to determine necessary resources), a customized library (list of files / software package) for execution of the application by the client, the client including one or more client-loaded types (preexisting software installation packages) already loaded on the client (col. 2, lines 35-60; col. 3, lines 1-25; col. 5, lines 4-17), the computer process comprising: identifying one or more application-referenced types developed by third parties on which the application depends on for execution but which are not part of the application (generate a manifest that lists all files of the application program which must be installed on the target computer system); identifying the one or more client-loaded types (determining which of the listed shared libraries are already included in one or more

Art Unit: 2195

preexisting software packages); comparing the one or more application referenced types to the one or more client loaded types to identify one or more client-needed types, wherein client needed types comprise one or more application-referenced types that are not client-loaded types (the list of shared library dependencies is compared with those libraries already present in preexisting software installation packages such that a list of any needed packages results from the comparison and is used in generating the new software installation package); generating the customized library, including the or more client-needed types (generating the new software package); and separately sending the customized library and the application to the client for execution (the application was previously ported to the client wherein it is debugged to determine and receive the referenced software files) (col. 2, lines 36-60; col. 3, lines 1-24; col. 3, lines 51-59; col. 4, lines 9-32; col. 4, lines 53-63; col. 5, lines 4-45). However, STAELIN does not teach explicitly teach receiving a request for the application or that the list is further filtered to remove and send only client-needed types. STAELIN does teach that the application is initially ported and debugged to determine what references to load. Official Notice is taken in that it is well known in the art that the application is requested before being ported to a user. Applicant can refer to the numerous of references previously cited in a showing that a client requests an application before it is sent to the client system.

MADANY teaches a linkage editor that receives a starting point of a program and determines the referenced components and which components are previously stored on the client such that these components are filtered out from the package (col. 6, lines 16-58). It would be obvious to one of ordinary skill in the art that when the teachings of

STAELIN are modified with the teachings of MADANY that components that are stored on the client are filtered out of the software package such that the software package only has client-needed types. Therefore, it would be obvious to one of ordinary skill in the art to combine the teachings of STAELIN with the teachings of MADANY in order to facilitate the packaging together of only the necessary components of an entire program and delivering it to the client before execution begins (col. 2, lines 53-63).

As to claims 4 and 10, STAELIN teaches identifying a version identifier (timestamp) of the referenced types and determining whether a new version of the application referenced type is needed by the client (via using the timestamps to determine if the files are placed on the list) (col. 4, line 46 – col. 5, line 3).

As to claim 6, both STAELIN and MADANY teach filter unwanted or unreferenced items from the packages (see the citations from the references given above).

As to claims 7 and 8, STAELIN teaches examining the application to identify one or more type references and generating a dependency list identifying the one or more application referenced types based on the type references (via using the timestamps to identifying whether a newer referenced file should be downloaded) (col. 2, lines 36-60; col. 3, lines 1-24; col. 3, lines 51-59; col. 4, lines 9-32; col. 4, lines 53-63; col. 5, lines 4-45).

As to claims 9 and 13, STAELIN teaches the comparing comprises generating and receiving a client composite list to identify the one or more client-needed types, the one or more client needed types including the one or more application referenced types not loaded on the client (via generating a manifest that is used to generating the software package) (col. 2, lines 36-60; col. 3, lines 1-24; col. 3, lines 51-59; col. 4, lines 9-32; col. 4, lines 53-63; col. 5, lines 4-45).

As to claim 11, STAELIN teaches accessing a client catalog specifying the one or more client loaded types on the client and examining the client catalog to identify the one or more client-loaded types (via examining preexisting software packages to see if they have the software dependencies stored) (col. 2, lines 36-60; col. 3, lines 1-24; col. 3, lines 51-59; col. 4, lines 9-32; col. 4, lines 53-63; col. 5, lines 4-45).

As to claim 12, MADANY teaches identifying the one or more client loaded types by receiving a list of the client loaded types from the client; and evaluating the client-loaded types against the application-referenced types to identify the client-needed types (via interface task receiving the list of components stored on client and evaluates the list with the components referenced in the application) (col. 6, lines 16-58).

As to claim 13, STAELIN teaches receiving a composite list specifying the one or more application-referenced types not loaded on the client (col. 2, lines 36-60; col. 3, lines 1-24; col. 3, lines 51-59; col. 4, lines 9-32; col. 4, lines 53-63; col. 5, lines 4-45).

As to claim 24, the claim is rejected for the same reasons shown as detailed in claim 1.

As to claims 26 and 27, the claim is rejected for the same reasons shown as detailed in claims 1, 9 and 11-13.

As to claims 30, 32 and 33, STAELIN teaches the catalog comprising dependency information identifying a client-loaded type referenced by the application and referencing other types (via the package including references to other software packages that were previously sent) (col. 2, lines 36-60; col. 3, lines 1-24; col. 3, lines 51-59; col. 4, lines 9-32; col. 4, lines 53-63; col. 5, lines 4-45).

As to claim 50, the claim is rejected for the same reasons shown as detailed in claims 1, 9 and 11-13.

As to claim 51, the claim is rejected for the same reasons shown as detailed in claims 1, 9 and 11-13.

3. Claims 14-20, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over STAELIN in view of MADANY as applied to claim 1 above, and further in view of BURRIDGE (U.S. Patent 6,918,106).

As to claims 14-20, STAELIN and MADANY teach the creating of a new software package and the sending of needed referenced files to a ported debugged application such that files that are located on the client are not sent (col. 2, lines 36-60; col. 3, lines 1-24; col. 3, lines 51-59; col. 4, lines 9-32; col. 4, lines 53-63; col. 5, lines 4-45).

However, STAELIN and MADANY do not explicitly detail that the data is class information.

BURRIDGE teaches creating a new library (col. 7, lines 49-51); and adding each of the one or more client needed types to the new library to provide the customized library (via creating a new library and adding the needed classes to the library) (col. 5, lines 16-45; col. 5, line 56 – 65; col. 5, line 66 – col. 6, line 10; col. 6, lines 15-28; col. 6, lines 50-52; col. 9, lines 3-13; col. 9, lines 23-29; abstract); adding one or more global data fields or classes of each client needed type to the new library (field for storing a class file) (col. 10, lines 19-28). It would be obvious to one skilled in the art at the time of the invention that since the library is created and then application files are placed in it, that the library file is initially empty and therefore would be obvious in view of the teachings of BURRIDGE that the library file is empty before metadata is added to the file. BURRIDGE further teaches a client request module requesting the application from a server (via the loader loading the main program unit) (col. 1, lines 28-29; col. 5, lines 56-59); identifying the application to be optimized (col. 5, lines 56-59); and an install point indicator associated with the application (pathnames for application files) (col. 5, lines 55-65). It would also be obvious to one of ordinary skill in the art that BURRIDGE's execution of the application to determine the necessary components is

Art Unit: 2195

the debugging of the application that is ported as outlined in STAELIN. Therefore, it would be obvious to one of ordinary skill in the art to modify the teachings of STAELIN with the teachings MADANY and BURRIDGE in order to facilitate the collocating only of program units required for executing a program (col. 2, lines 48-53).

As to claims 29 and 31, refer to claims 14-20 for rejection.

Allowable Subject Matter

4. Claims 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments with respect to claims 1, 2, 4, 6-22, 24, 26, 27, 29-33, 50 and 51 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

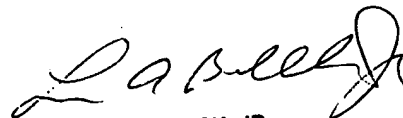
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571) 272-3759. The examiner can normally be reached on Monday-Friday, 8:30 a.m. - 5:00 p.m..

Art Unit: 2195

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 27, 2006


LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER